

MEMORANDUM

To:	Gary Miller and Anne Foster U.S. Environmental Protection Agency	Date:	November 18, 2015
From:	John Laplante, John Verduin, Wendell Mears, and David Keith, Anchor QEA	Project:	090557-01.06
Cc:	Phil Slowiak, IP David Moreira, MIMC		
Re:	Post-TCRA Semi-Annual Inspection Report – October 2015		

Introduction

This document reports the results of the October 2015 inspection of the armored cap cover, fencing, and signage installed for the Time Critical Removal Action (TCRA) at the San Jacinto River Waste Pits Superfund Site (TCRA Site).

Background

The TCRA was implemented by International Paper Company (IP) and McGinnes Industrial Maintenance Corporation (MIMC) under an Administrative Settlement Agreement and Order on Consent (AOC) with the U.S. Environmental Protection Agency (USEPA) – Docket No. 06-12-10, effective May 17, 2010. A full description of the TCRA implementation is provided in the associated project documentation:

- Removal Action Work Plan (RAWP; Anchor QEA 2010, 2011)
- Revised Draft Final Removal Action Completion Report¹ (RACR; Anchor QEA 2012)

¹ David Keith, Respondents' Project Coordinator, received a RACR (in the form issued by USEPA) from Valmichael Leos via email on August 15, 2012; however, the appendices to the RACR including the OMM Plan, were not provided to Dr. Keith as part of the document. The OMM Plan had been previously approved by USEPA (in an email from Mr. Leos dated January 18, 2012) and is assumed to remain unchanged. Respondents reserve all rights related to the changes made by USEPA to the Revised Draft Final RACR, submitted by Respondents to USEPA on March 9, 2012.

The inspection summarized in this report was conducted in accordance with the schedule established in the Operations, Monitoring, and Maintenance (OMM) Plan (Appendix N of the RACR – Anchor QEA 2012)² and timing that was modified to avoid winter low tide surveys that present health and safety concerns to the surveyors. The OMM Plan specifies the timing, pertinent items, tolerances, and procedures for inspection, maintenance, and repair of the armored cap, fencing, and signage installed for the TCRA Site.

Visual Inspection

The visual inspection, which took place on October 13, 2015, included evaluation of the TCRA elements referenced below:

- Inspection of the security fence and signage surrounding the TCRA Site.
- Inspection of the armored cap that was visible above the water line of the San Jacinto River.
- Visual confirmation that waste materials are not actively eroded into the San Jacinto River.

Photographs of conditions observed during the visual inspection are provided in Appendix A (Figures A-1 to A-5). A summary of each facet of the visual inspection is provided in the following sections.

Armored Cap

Photographs of the armored cap from the inspection event are provided in Appendix A (see Photographs 2 through 11). The majority of the Eastern Cell armored cap was underwater at the time of the initial inspection. All of the visible portions of the armored cap were observed to be intact, and no movement of cap materials was observed at any location. A subsequent visual inspection occurred on October 26, 2005 and is discussed below.

² The OMM Plan was attached to the Draft Final RACR, submitted to USEPA on November 22, 2011, and authorization to implement the OMM Plan was contained in an email from USEPA dated January 18, 2012. The OMM Plan was also attached as an appendix to the Revised Draft Final RACR submitted to USEPA on March 9, 2012.

Perimeter Fencing

The perimeter fencing on the west and east banks of the San Jacinto River was visually inspected for breaches or other signs of damage. No breaches or other signs of fence damage were observed during the inspection for any of the three sections of the fence: the east bank, the west bank on the north side of I-10, or the west bank on the south side of I-10. For examples, see Photographs 12 and 14 through 16 in Appendix A.

The portion of the fence installed along the south boundary of the San Jacinto River Fleet (SJRF) property is not included in the fencing inspection, as the SJRF property is currently occupied by an active facility that conducts daily security checks, as required by the U.S. Coast Guard and Transportation Security Administration, for an active maritime fleeing area.

In the east bank area south of I-10 there was evidence of demobilization of construction for offloading under TxDOT's access agreement with Linde. It is the Respondents' understanding that TxDOT will work with Linde on any steps necessary to restore the fencing in the east bank area to its pre-construction condition in accordance with the Linde access agreement. At the time of inspection the east and west bank gates were secure.

Signage

"Danger" and "No Trespassing" signs are posted at regular intervals on the perimeter fencing surrounding the TCRA Site. For examples, see Photographs 12 and 14 in Appendix A. These signs were observed to be in place during the October 13, 2015 inspection.

A total of fifteen signs were installed at the TCRA Site around the perimeter of the land portion of the TCRA Site; the signs are mounted on steel posts and set in concrete pads. For examples, see Photographs 5 through 8 in Appendix A. These signs are intended to face the San Jacinto River to deter water-based entry to the TCRA Site. A few of these signs had rotated out of proper alignment due to the wind, and the affected signs were re-aligned to the intended viewing perspective.

Three USEPA Public Notice signs are present around the TCRA Site located: 1) near the gate entry point for the perimeter fence north of I-10; 2) near a gate entry point south of I-10; and

3) at the end of the TxDOT right-of-way north of I-10 near the San Jacinto River. For examples, see Photographs 1, 4, and 15 in Appendix A. These three signs were observed to be in place and undamaged.

Signage on all locked gates reminds entrants to “daisy chain” the locks properly prior to leaving the TCRA Site, as seen in Photograph 1. These signs were observed to be in place and undamaged.

Table 1 summarizes the condition of the TCRA Site signage described in this section.

Table 1
TCRA Perimeter Fencing and Sign Inspection Punch List

Task	Status	
	Completed	Date
Perimeter Fence Visually inspect the perimeter fencing on the east and west sides of the San Jacinto River.	Yes	10/13/2015
“Danger” and “No Trespassing” Signs Visually inspect the 15 signs to verify that they remain in place.	Yes	10/13/2015
USEPA Public Notice Signs Visually inspect the 3 signs to verify that they remain in place.	Yes	10/13/2015
Daisy Chain Signs Visually inspect the 2 signs to verify that they remain in place.	Yes	10/13/2015

Surveys

Portions of the armored cap above the water surface or at a water depth too shallow to access by boat were surveyed using land-based topographic survey techniques. A bathymetric survey was performed for the portions of the armored cap below the water surface and accessible by boat. The surveyor followed the track line spacing, measurement intervals, and accuracy requirements detailed in the OMM Plan.

Survey Tolerance Requirements

The OMM Plan requires that each survey be compared with the prior completed survey using the following criteria:

1. Areas with elevations that are within 6 inches of the previous survey require no action.
2. Contiguous areas with elevation changes exceeding plus or minus 6 inches triggers a review of the survey benchmarks for accuracy or movement.
3. Areas where surveyed elevations are 6 inches higher or lower than the prior survey for a contiguous area larger than 30 feet by 30 feet will require probing to measure the cap thickness.

Survey Results

The survey data from the October 2015 inspection survey and the July 2015 surveys were compared to evaluate the differences in the top of the armored cap elevation. These differences are shaded and shown on Figure 3. The survey results indicate continued sedimentation/deposition on the surface of the armored cap in submerged areas.

Manual probing of armored cap thickness is required at areas identified by the topographic or bathymetric surveys as more than 6 inches lower in elevation than during the prior survey over contiguous areas of 30 feet by 30 feet. When the October 2015 and July 2015 surveys were compared, the results indicated that there were no areas that met the manual probing requirement. Therefore, no probing was conducted as part of the October 2015 inspection.

The small areas identified as increases and decreases in elevation can be attributed to the horizontal and vertical limitations of the survey, minor shifts in track line location from the baseline survey, and elevation data recorded in the crevices between rock surfaces or atop shellfish growth. The potential for these types of variations between the two datasets to exist was confirmed by the surveyor after reviewing the data collected during this inspection.

Repairs to TCRA Construction Elements

No TCRA construction elements were identified as deficient or damaged during this inspection event. No maintenance was required to the TCRA cap in response to the October 2015 inspection.

Post-Rain Visual Inspection

A voluntary visual inspection was performed on October 26, 2015 after two days of heavy rainfall. Nearly 8 inches of rain fell in the area on October 24 and 25, 2015, but the stage height at Lake Houston Dam stayed well below the 10-year flood level. The majority of the Eastern Cell was visible above the water level during the visual inspection. No movement of cap material was observed. See Photographs 17 through 20 for site conditions after the storm.

Inspection Summary

The post-TCRA inspections during October 2015 did not identify damaged areas in the perimeter fence or signage. The armored cap remains intact.

List of Appendices

Appendix A – Inspection Photographic Log

References

Anchor QEA, LLC (Anchor QEA), 2010. *Removal Action Work Plan, San Jacinto River Waste Pits Superfund Site*. Prepared for U.S. Environmental Protection Agency (USEPA) Region 6 on behalf of McGinnes Industrial Maintenance Corporation and International Paper Company. November 2010.

Anchor QEA, 2011. *Removal Action Work Plan, San Jacinto River Waste Pits Superfund Site*. Prepared for U.S. Environmental Protection Agency (USEPA) Region 6 on behalf of McGinnes Industrial Maintenance Corporation and International Paper Company. Revised February 2011.

Anchor QEA, 2012. *Revised Draft Final Removal Action Completion Report, San Jacinto River Waste Pits Superfund Site*. Prepared for McGinnes Industrial Maintenance Corporation, International Paper Company, and U.S. Environmental Protection Agency (USEPA) Region 6. Revised March 2012.

USEPA, 2010. *Administrative Settlement Agreement and Order on Consent for Removal Action*. U.S. Environmental Protection Agency Region 6 CERCLA Docket No. 06-03-10. In the matter of: San Jacinto River Waste Pits Superfund Site Pasadena, Harris County, Texas. International Paper Company & McGinnes Industrial Management Corporation, Respondents.

FIGURES

M:\CAD\Projects\0557-mcginnes industrial maintenance corp\san jacinto waste pits\quarterly inspection reports\2015-10\0557-QIR-001.dwg Vicinity Map
Oct 29, 2015 9:26am dholmer

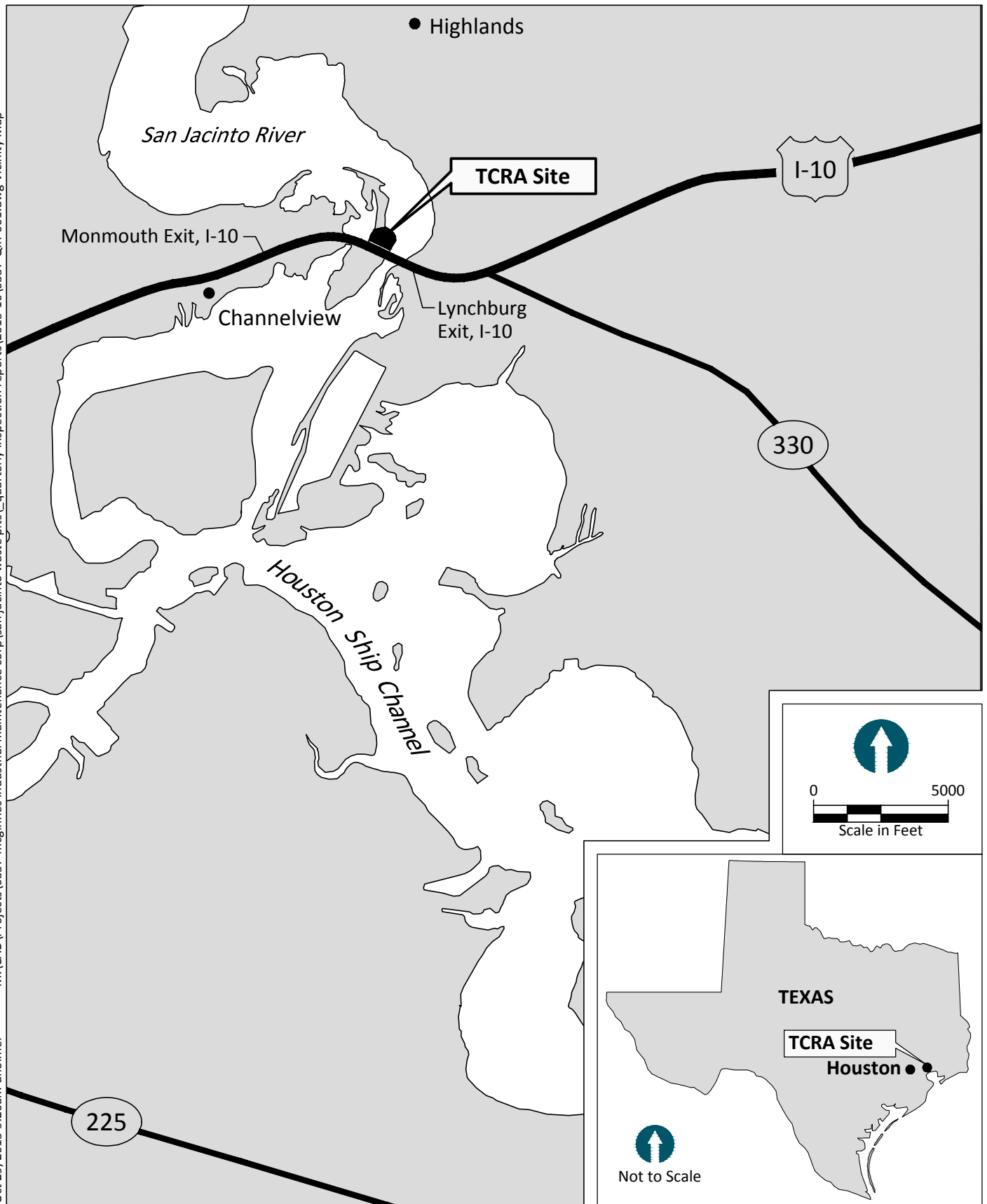


Figure 1

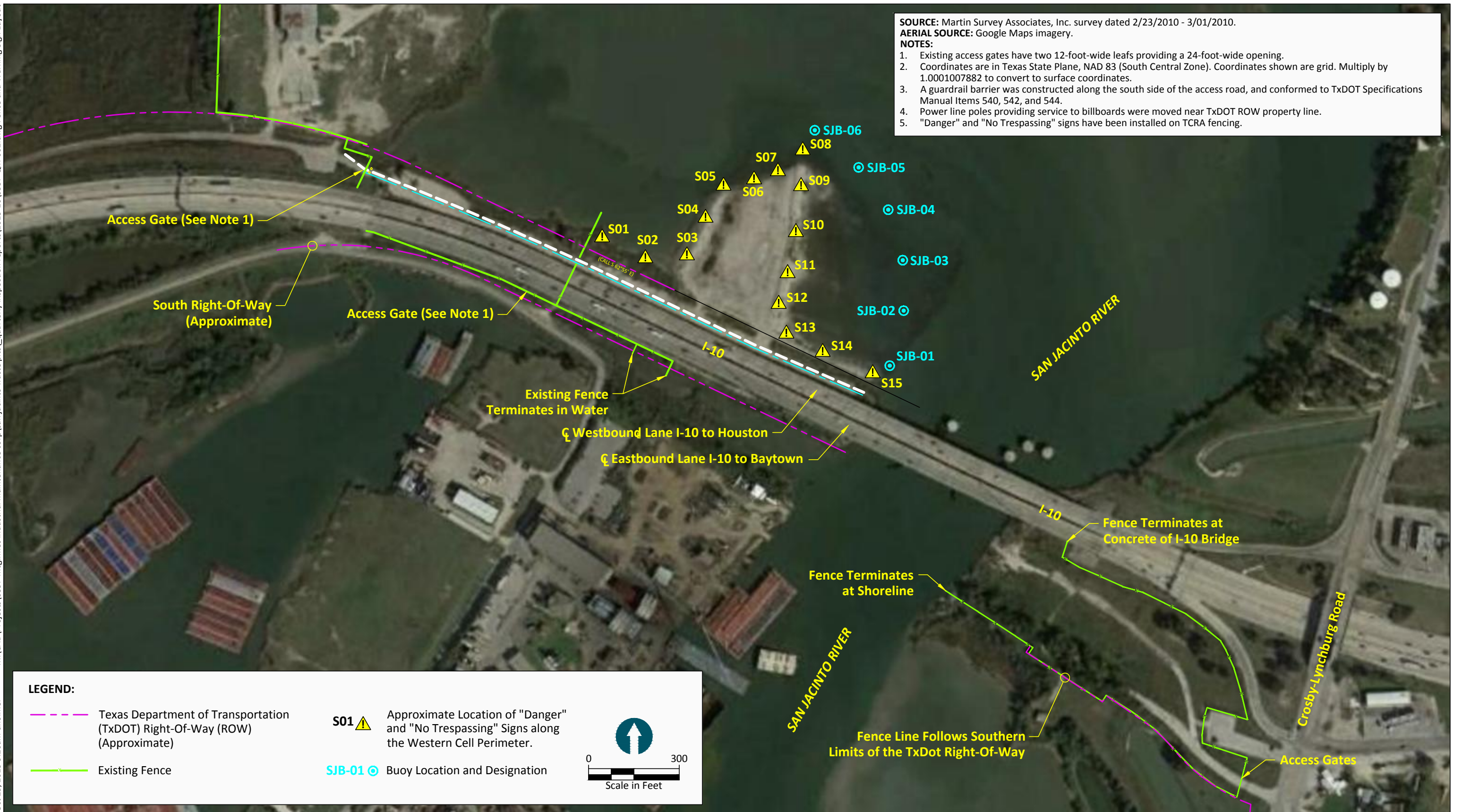
Vicinity Map

Post TCRA Semi-Annual Inspection (October 2015)

San Jacinto River Waste Pits Superfund Site



M:\CAD\Projects\0557-mcginnes industrial maintenance corp\san jacinto waste pits\quarterly inspection reports\2015-10\0557-QIR-002.dwg Fence and Warning Sign Layout
Oct 29, 2015 9:26am dholmer

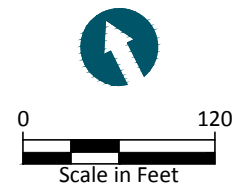




LEGEND:

- October 2015 Bathymetric and Topographic Contours (1 Foot Interval)
- Armored Cap Type and Boundary
- Historic Impoundment Limits
- > 1.0 Foot Increase
- 0.5 Foot Increase to 1.0 Foot Increase
- 0.5 Foot Increase to 0.5 Foot Decrease
- 0.5 Foot Decrease to 1.0 Foot Decrease
- > 1.0 Foot Decrease
- Example 30'x30' Area

SOURCE: Drawing prepared from surveys provided by Hydrographic Consultants dated July 2015 and October 2015.
HORIZONTAL DATUM: Texas State Plane South Central, NAD83, U.S. Feet.
VERTICAL DATUM: NAVD 88.



APPENDIX A

INSPECTION PHOTOGRAPHIC LOG



Photograph 01: USEPA Public Notice Sign located outside access gate north of I-10 (view east)



Photograph 02: Interior of Western Cell (view northwest)



Photograph 03: Hydrographic Consultants performing topographic survey on southern berm (view east)



Photograph 04: USEPA Public Notice Sign located north of I-10 on west bank of San Jacinto River (view south)



Photograph 05: Warning signs along southern berm (view west)



Photograph 06: Hydrographic Consultants performing topographic survey on central berm (view north)



Photograph 07: Warning sign along central berm (view northwest)



Photograph 08: Warning signs along western berm and Eastern Cell (view north)



Photograph 09: Central berm and Eastern Cell (view northeast)



Photograph 10: Warning signs along western berm (view south)



Photograph 11: Interior of Western Cell (view northeast)



Photograph 12: Signage and perimeter fencing south of I-10 on west bank (view north)



Photograph 13: Fish consumption advisory signs south of I-10 on west bank (view south)



Photograph 14: Signage and perimeter fencing south of I-10 on west bank (view northwest)



Photograph 15: USEPA Public Notice Sign south of I-10 on west bank (view north)



Photograph 16: Perimeter fencing south of I-10 on east bank (view northeast)



Photograph 17: Interior of Western Cell after heavy rainfall on October 24-25, 2015
(view northwest)



Photograph 18: Eastern Cell after heavy rainfall on October 24-25, 2015
(view northwest)



Photograph 19: Central berm after heavy rainfall on October 24-25, 2015
(view north)



Photograph 20: Western berm after heavy rainfall on October 24-25, 2015
(view south)